CLAIMS

I claim:

1. A method for dynamically allocating a plurality of wireless channel sets within a served area which is responsive to subscriber traffic loading on said channel sets, each of said channel sets providing wireless communication services to subscribers to one or more wireless service providers, said method consisting of the steps of:

(a) providing a means of estimating the subscriber traffic loading on each of said channel sets without direct interface to at least one wireless communications service network, and

(b) providing a means to determine if more efficient use of said channel sets can be made by redistributing said channel sets among radiating elements in said served area, and

(c) providing a means to control the distribution of said channel sets among said radiating elements in said served area.

2. The method of claim **1**, wherein said means of estimating said subscriber traffic loading of one or more of said channel sets is derived from the measurement of radio frequency signal strength of said channel sets.

3. The method of claim **1**, wherein said means of estimating said subscriber traffic loading of one or more of said channel sets is derived from the measurement of optical signal strength of said channel sets.

4. The method of claim **1**, wherein said means of estimating said subscriber traffic loading of one or more of said channel sets is derived from monitoring a digital representation of the waveform of said channel sets.

5. The method of claim **1**, wherein said means of estimating said subscriber traffic loading of one or more of said channel sets is derived by decoding at least one control channel associated with said channel sets.

6. The method of claim **1**, wherein said estimate of said subscriber traffic loading of one or more of said channel sets is obtained directly from the wireless network controlling said channel set.

7. The method of claim **1**, wherein said means to determine if more efficient use of said channel sets can be made incorporates non-real-time considerations.

8. The method of claim **1**, wherein said means to determine if more efficient use of said channel sets can be made includes hysteresis.

9. The method of claim **1**, wherein said means to determine if more efficient use of said channel sets can be made includes a prediction based on history of said subscriber traffic loading.

10. The method of claim **1**, wherein said means of redistribution of said channel sets performs switching of radio frequency signal paths.

11. The method of claim **1**, wherein said means of redistribution of said channel sets performs switching of optical signal paths.

12. The method of claim **1**, wherein said means of redistribution of said channel sets performs switching of digital signal paths.